

ATTENTION!

This material may not be reproduced or used without prior written permission. Making copies or printing of any part of this material without written permission is prohibited. For reproduction permission contact, American Electric Power and Associated Training Corporation.

Art and graphics contained in this presentation bearing Associated Training Corporation copyright notices are the exclusive property of Associated Training Corp. All rights are strictly reserved by Associated Training Corp. It may not be reproduced, printed or otherwise duplicated in any medium without prior written consent from Associated Training Corp.

This material is provided as is, without warranty of any kind, either expressed or implied, respecting the contents of this material, including but not limited to implied warranties of the material's quality, performance, merchant ability, or fitness for any particular purpose.

Neither its author, publisher or sponsor shall be liable to the user or any other person or entity with respect to any liability, loss or damage caused or alleged to be caused directly or indirectly from this material.

Use of interpretative materials as a procedural or operating information resource can possibly result in injury to the user or others and damage to equipment. These materials are formatted for interpretative purposes only and are not to be used as a reference or information source for actual installation, operation, testing, maintenance or other operating purposes.

The author, publisher or sponsor are not responsible for damage or injury resulting from such misuse of this material.

Associated Training Corporation
972-889-9075 Fax 972-889-9135
www.atc-online.net www.atc-trng.com E mail atc@airmail.net

A faded, light-colored background image showing a worker on a conductive boom. The worker is positioned on a horizontal boom that is part of a larger structure, possibly a truck or a piece of equipment. The worker is wearing a hard hat and safety gear. The boom is supported by a vertical structure. The overall scene is a technical illustration of a worker on a conductive boom.

Why Ground Trucks With Conductive Booms

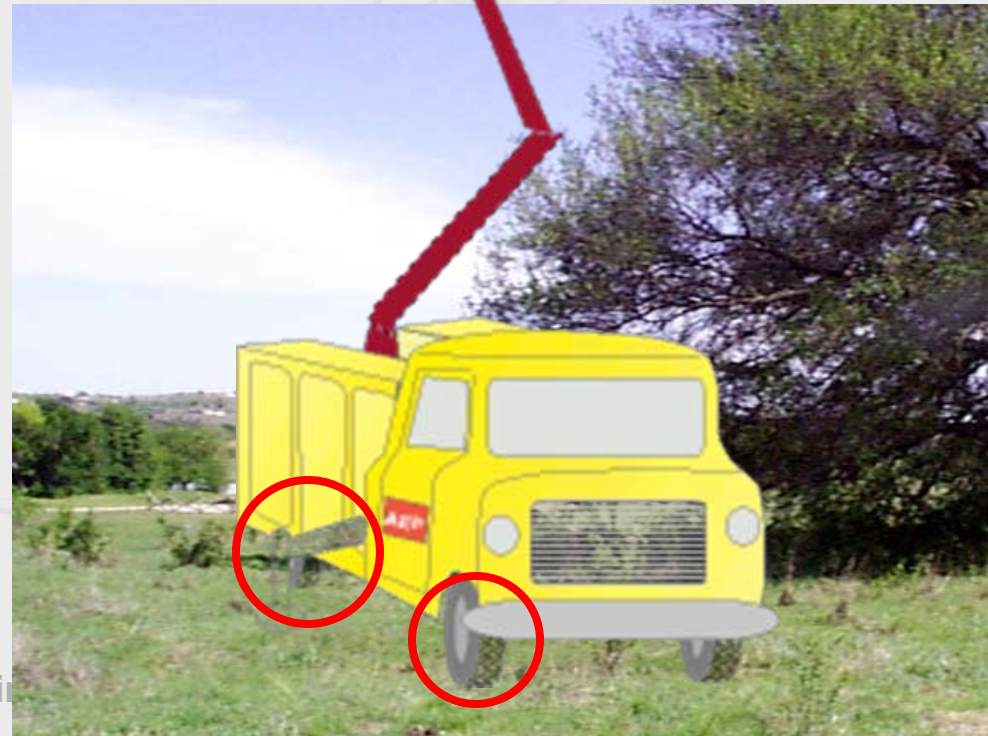
Understanding Truck Grounding

 **Fact - All trucks connect to earth thru:**


 **Tires**

 **Stabilizers**

 **Weeds & Grass touching axles**



Understanding Truck Grounding

 **Fact – Insulated booms insulate aerial workers from ground connection**

 **Fact – Insulated booms insulate ground workers from accidental energization**



Understanding Truck Grounding



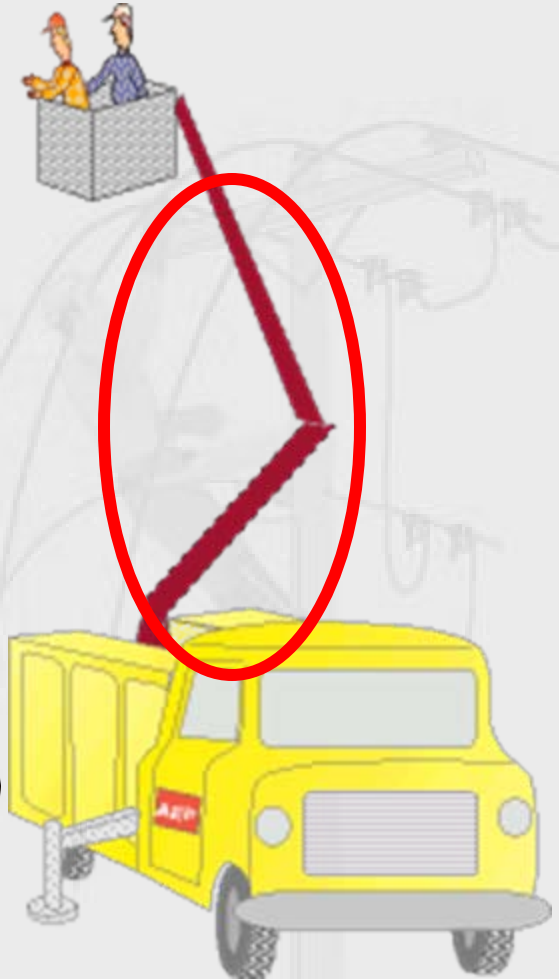
Truck grounding offers less benefit on trucks with insulated booms



Understanding Truck Grounding



Fact – Conductive booms can be hazardous



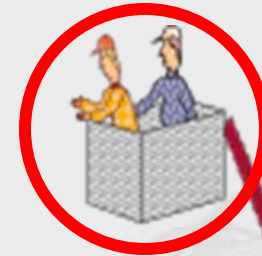
Understanding Truck Grounding



Fact – Conductive booms can be hazardous



Fact – Both aerial and ground personnel have exposure if boom is energized



Understanding Truck Grounding

▲ Fact – Hole diggers can contact energized conductors with:

▲ Boom


▲ Winch line

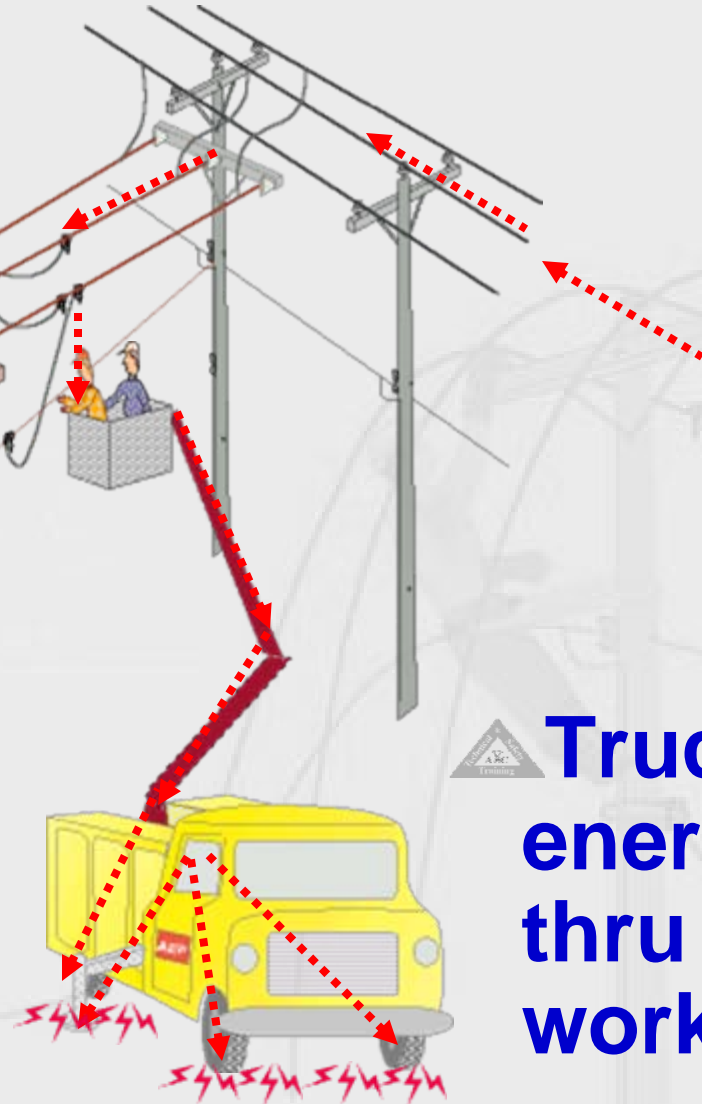
▲ Poles

▲ Always wear rubber gloves, barricade and avoid body contact




Understanding Truck Grounding

 **Ungrounded truck
- Worker provides
current path thru
truck tires and
stabilizer**

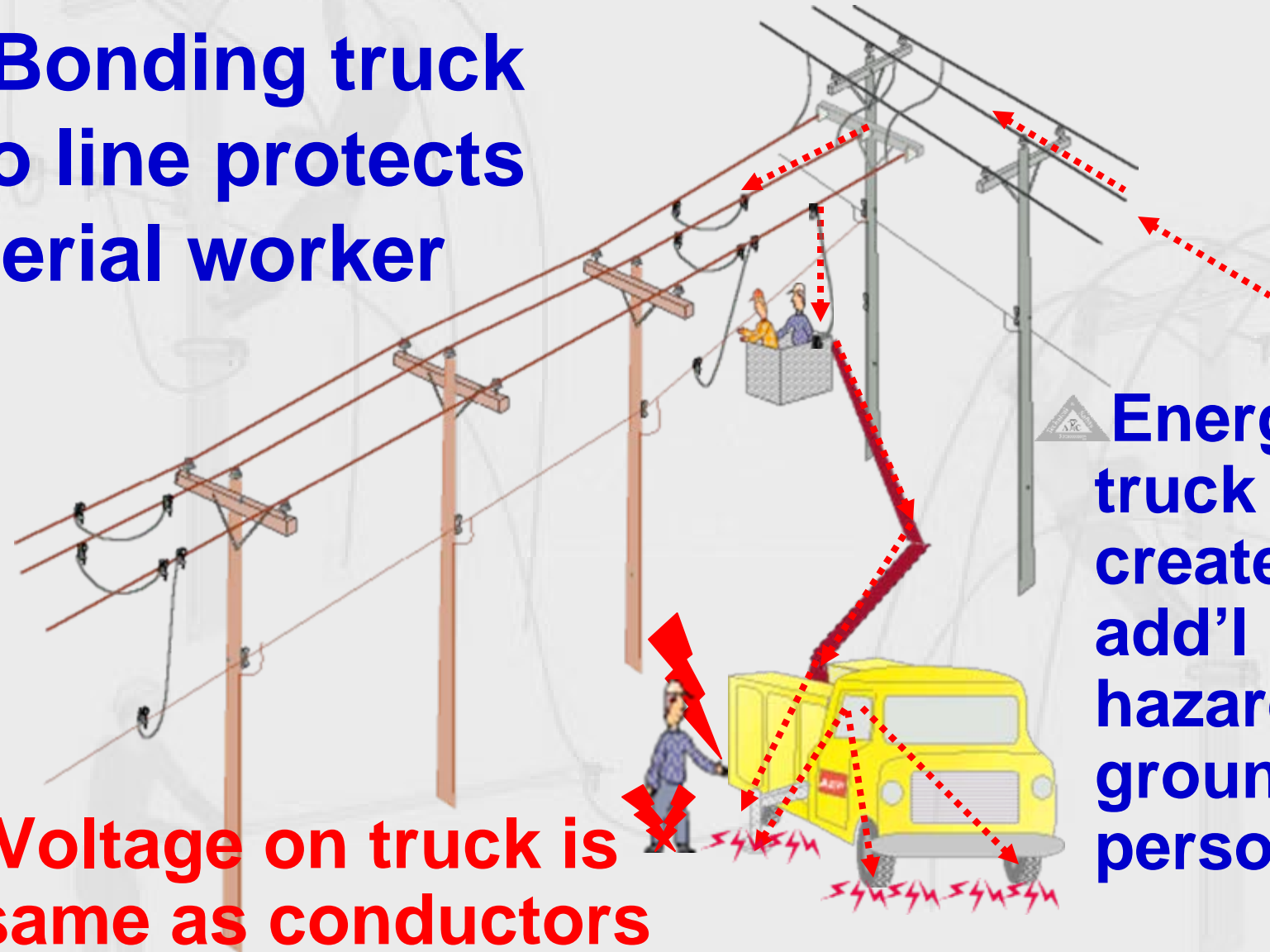



 **Both worker & truck
contact energizes truck**

 **Truck is
energized
thru
worker**

Understanding Truck Grounding

 **Bonding truck to line protects aerial worker**



 **Energized truck creates add'l hazard for ground personnel**

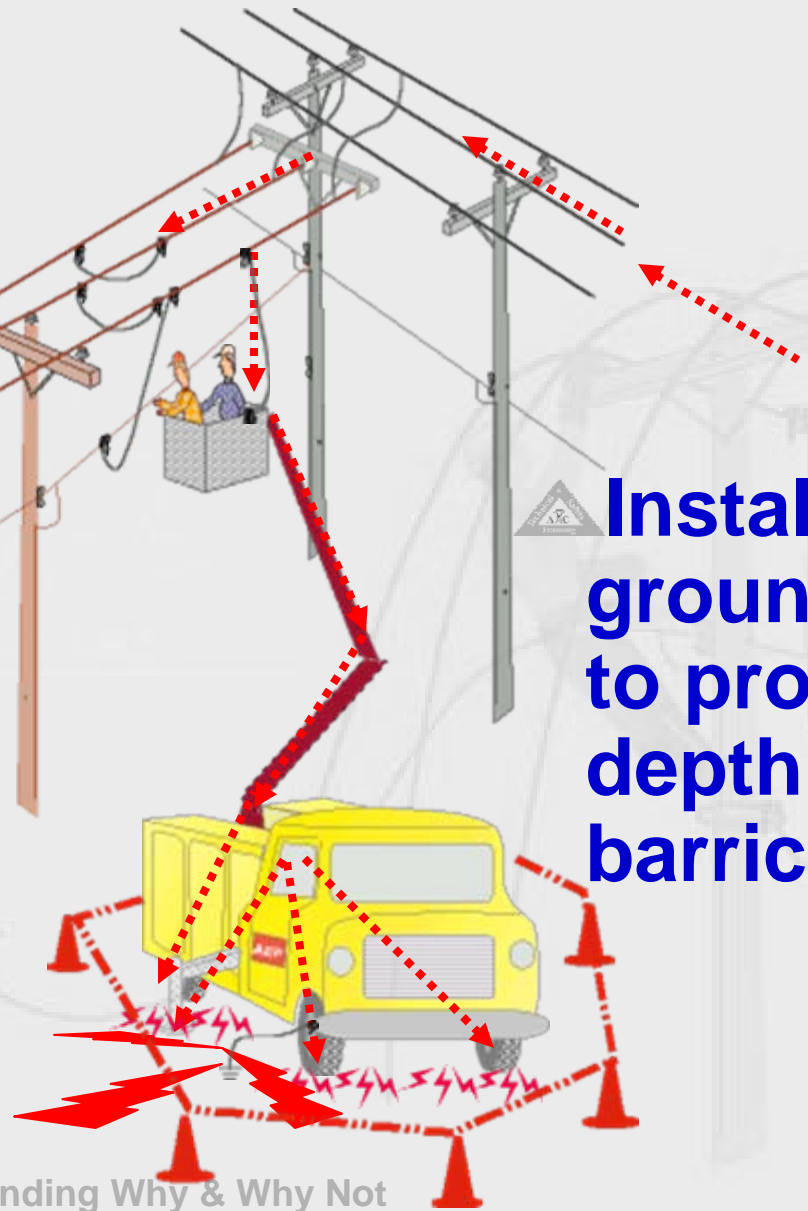
 **Voltage on truck is same as conductors**

Understanding Truck Grounding


**Solution –
Barricade & bond
truck & install
driven ground rod**

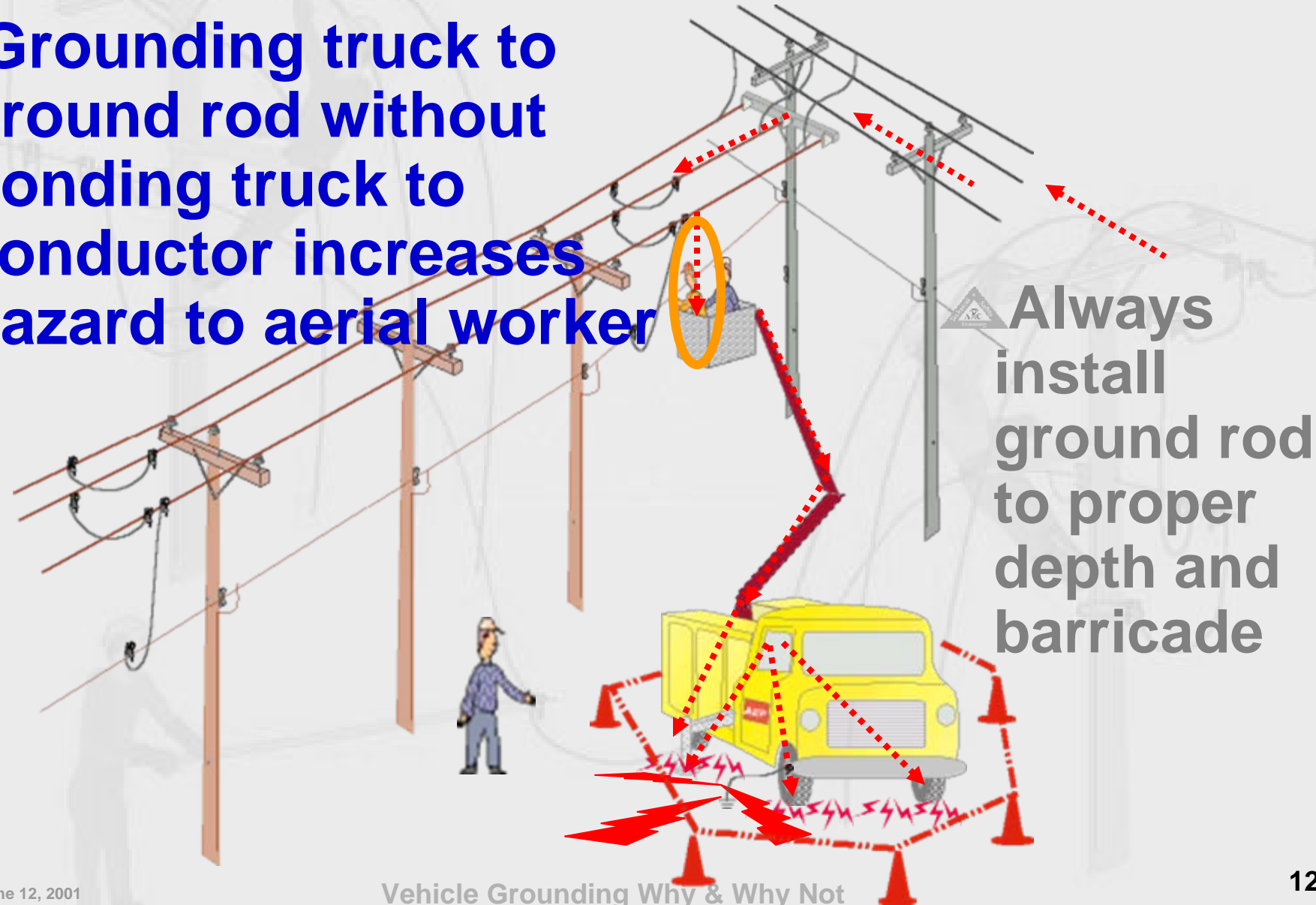
**Install
ground rod to proper
depth and
barricade**

**Grounding
truck reduces
truck potential**



Understanding Truck Grounding

 Grounding truck to ground rod without bonding truck to conductor increases hazard to aerial worker



 Always install ground rod to proper depth and barricade

Understanding Truck Grounding




Remember the golden rule is to:

Never put yourself

in a current path!

By-pass the worker, or
impedance the ground.

Understanding Vehicle Grounding

-  Remember there is always more than one safe way to do any job.
-  When in doubt ground and wear rubber gloves.
-  E Mail **info@atc-trng.com** for additional information on vehicle grounding.